

ABSTRACT

A communication device is provided with a turbo encoder
(1) which carries out a turbo encoding process on the lower
two bits of transmission data so as to output information
5 bits of two bits and redundant bits of two bits, a conversion
(2) which carries out calculations so as to uniform
error-correction capabilities on respective information
bits by using the output, decoders (11 to 18) which carries
out a soft-judgment on the lower two bits of the received
10 signal that are susceptible to degradation in the
characteristics so as to estimate the original transmission
data, and a second judging device (19) which carries out
a hard-judgment on the other bits in the received signal
so as to estimate the original transmission data.